

Application Serial No.: 10/694,762

Further to the Request for Reconsideration filed on December 29, 2004,  
and in response to the Office Action dated September 29, 2004

REMARKS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-3 and 6-16 are presently active in this case, Claims 1-3 and 6-10 having been amended and Claims 11-16 having been added by way of the present Amendment.

The Applicants want to thank Examiner Thomas Williams for the courtesies extended to Applicants' representative, Christopher Ward, during the personal interview conducted on February 9, 2005. During the interview, Examiner Williams suggested rewording the claims to change "shock absorber" to "impact absorber" to better reflect the invention. The Applicants have made amendments to the claims in light of Examiner's William's suggestion.

Support for the amendments to Claim 1 can be found throughout the specification. By way of illustration and not limitation, the paragraph [0029] provides support for an embodiment where the absorbing member (2) deforms plastically together with the housing (1) to absorb energy during a collision of the vehicle. Support for Claims 11-13 can be found, for example, in paragraphs [0023]-[0029]. Support for Claim 14 can be found, for example, in paragraph [0048]. Support for Claim 15 can be found, for example, in paragraphs [0056]-[0061]. Support for Claim 16 can be found, for example, in paragraph [0029].

Claims 1-3 and 6-10 were rejected under 35 U.S.C. 103(a) as being unpatentable over Fehlberg (U.S. Patent No. 3,731,896) in view of Inoue et al. described on page 2 of the present application. For the reasons discussed below, the Applicants request the withdrawal of the obviousness rejection.

Application Serial No.: 10/694,762

Further to the Request for Reconsideration filed on December 29, 2004,  
and in response to the Office Action dated September 29, 2004

The basic requirements for establishing a *prima facie* case of obviousness as set forth in MPEP 2143 include (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings, (2) there must be a reasonable expectation of success, and (3) the reference (or references when combined) must teach or suggest all of the claim limitations. The Applicant submits that a *prima facie* case of obviousness cannot be established in the present case because the cited references fail to disclose or suggest, either singularly or in combination, all of the features recited in amended independent Claim 1.

As discussed during the personal interview, the Applicants submit that the cited references fail to teach or suggest an impact absorber comprising a housing having an impact receiving member with at least one hollow formed therein and configured to plastically deform upon impact, and an impact-energy absorbing member formed of a super plastic polymer material and disposed in a manner contacting closely with an inner surface of the impact receiving member, as recited in Claim 1 of the present application. By way of illustration and not limitation, the specification of the present application describes an embodiment in which a crush-box as depicted in Figure 1 is provided with an absorbing member (2) provided therein. The housing of the crush box is configured to deform plastically to absorb energy during a collision of the vehicle. (See paragraph [0029].) Further by way of illustration and not limitation, the specification of the present application describes an embodiment in which a cylinder-shaped housing (3) configured to be provided outside of an impact beam (5) as depicted in Figure 4, where the housing (3) is configured to deform plastically to absorb energy during a collision of the vehicle. (See paragraph [0053].)

Application Serial No.: 10/694,762

Further to the Request for Reconsideration filed on December 29, 2004,  
and in response to the Office Action dated September 29, 2004

Further by way of illustration and not limitation, the specification of the present application describes an embodiment in which housing (6) of a side sill as depicted in Figure 7 is provided with an absorbing member (7), where the housing is configured to deform plastically to absorb energy during a collision of the vehicle. (See paragraph [0061].)

The Fehlberg reference describes an engine mount assembly for resiliently supporting an engine on a frame of a motor vehicle. The engine mount assembly includes a frame attaching bracket in which is mounted an engine attaching bushing. The bushing and bracket have a plurality of cooperating opposed walls providing separate spaces in which rubber is molded and assembled in compression to provide resilient engine mounting for jounce, fore and aft, and roll movement with respect to the frame.

The Fehlberg reference does not disclose or even suggest an impact absorber, as recited in Claim 1. As noted above, the Fehlberg reference is concerned with resiliently mounting an engine on a frame of a motor vehicle, such that vibrations are prevented from being transmitted to the frame. Accordingly, the Fehlberg reference does not disclose or suggest a housing having an impact receiving member configured to plastically deform upon impact. The frame attaching bracket assembly (33) of the Fehlberg reference, which was previously cited for the teaching of the housing of the present invention, is not configured to receive an impact or plastically deform upon impact. The Fehlberg reference is not concerned with such collision impacts, but rather with a resilient mount for the engine. Additionally, the Fehlberg reference does not disclose an impact-energy absorbing member, as recited in Claim 1 of the present application.

The Inoue et al. reference is cited for the teaching of the super plastic polymer material, which is not disclosed in the Fehlberg reference. While the Inoue et al. reference

Application Serial No.: 10/694,762

Further to the Request for Reconsideration filed on December 29, 2004,  
and in response to the Office Action dated September 29, 2004

describes a plastic material, the Inoue et al. reference does not disclose or even suggest an impact absorber, as recited in Claim 1. For example, the Inoue et al. does not disclose or suggest a housing having an impact receiving member configured to plastically deform upon impact. The Inoue et al. reference does not disclose or suggest the use of the material described therein in the structural configuration recited in the claims of the present application. The Inoue et al. does not disclose or suggest a housing having an impact receiving member configured to plastically deform upon impact, and an impact-energy absorbing member formed of a super plastic polymer material disposed in a manner contacting closely with an inner surface of the impact receiving member, as recited in Claim 1.

Since neither reference discloses a housing having an impact receiving member configured to plastically deform upon impact, and since neither of the references even suggests an impact absorber as recited in Claim 1, the Applicants respectfully submit that a *prima facie* case of obviousness cannot be established with respect to Claim 1 based upon the combination set forth in the Official Action.

It is well settled that it is impermissible simply to engage in hindsight reconstruction of the claimed invention, using Applicants' structure as a template and selecting elements from the references to fill in the gaps. *In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991). Recognizing, after the fact, that a modification of the prior art would provide an improvement or advantage, without suggestion thereof by the prior art, rather than dictating a conclusion of obviousness, is an indication of improper application of hindsight considerations. Simplicity and hindsight are not proper criteria for resolving obviousness. *In re Warner*, 397 F.2d 1011, 154 USPQ 173 (CCPA 1967).

Application Serial No.: 10/694,762

Further to the Request for Reconsideration filed on December 29, 2004,  
and in response to the Office Action dated September 29, 2004

Accordingly, the Applicants respectfully request the withdrawal of the obviousness  
rejection of Claim 1.

Claims 2, 3, and 6-16 are considered allowable for the reasons advanced for Claim 1  
from which they depend. These claims are further considered allowable as they recite other  
features of the invention that are neither disclosed nor suggested by the applied references  
when those features are considered within the context of Claim 1.

Consequently, in view of the above discussion, it is respectfully submitted that the  
present application is in condition for formal allowance and an early and favorable  
reconsideration of this application is therefore requested.

Respectfully Submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.



Gregory J. Maier  
Registration No. 25,599  
Attorney of Record

Christopher D. Ward  
Registration No. 41,367

Customer Number

**22850**

Tel. (703) 413-3000  
Fax. (703) 413-2220  
(OSMMN 10/01)

GJM:CDW:brf  
I:\atty\cdw\244555US3\am3.doc